RHIZOCTONIA BLIGHT OF BOSTON FERN

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Boston fern, Nephrolepis exaltata (L.) Schott var. bostoniensis Davenport, and cultivars selected from it are grown commercially in great quantities as pot plants. Because of their gracefully arching appearance, Boston ferns are particularly attractive in hanging baskets. Although there are at least 43 named cultivars of Boston fern (1), only a few ('Florida Ruffle', 'Fluffy Ruffles', etc.) are available commercially. A severe foliar blight of these ferns is often observed during warm, wet conditions. This blight is caused by the fungus Rhizoctonia sp. (A).

SYMPTOMS. Initial symptoms appear as a brownish black wet rot affecting the leaflets. Upon drying, the infected leaflets become tan in color. During periods of warm, wet conditions the pathogen spreads rapidly, resulting in blighting of the entire plant (fig. 1). Severely infected leaflets are overrun with fine red-brown strands (hyphae) of the fungus which mat the leaflets together.

CONTROL. Rhizoctonia blight is severe only when foliage remains wet for extended periods of time (2). Cultural practices such as growing plants under cover, improved ventilation, wider spacing of plants, and plastic tube watering systems to eliminate overhead irrigation will aid in disease control (3). When fungicides are required, benomyl, chlorothalonil, and thiabendazole have proved effective for the control of Rhizoctonia blight (2).



Fig. 1. Boston fern with center of plant blighted by _Rhizoctonia.

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Literature Cited

- 1. Crockett, J. U. 1975. The Boston fern and its exotic mutations. Horticulture 53(10):2-3.
- 2. Knauss, J. F. 1971. Rhizoctonia blight of 'Florida Ruffle' fern and its control. Plant Dis. Reptr. 55:614-616.
- 3. Knauss, J. F. 1973. Common diseases of tropical foliage plants. Florists' Rev. 152:25,27,56-58.
- 4. West, E. 1929. The damp-off disease of Boston ferns. Univ. Fla. Agr. Exp. Sta. Press Bull. 410.